[Federal Register Volume 77, Number 69 (Tuesday, April 10, 2012)]
[Rules and Regulations]
[Pages 21404-21420]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2012-8450]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-0109; Directorate Identifier 2007-NM-235-AD; Amendment 39-16990; AD 2012-06-09]

RIN 2120-AA64

Airworthiness Directives; Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, and 382G airplanes. This AD was prompted by a report of incidents involving fatigue cracking and corrosion in transport category airplanes that are approaching or have exceeded their design service objective. This AD requires revising the maintenance inspection program to include inspections that will give no less than the required damage tolerance analysis for each principal structural element (PSE), doing repetitive inspections to detect cracks of all PSEs, and repairing cracked structure. We are issuing this AD to maintain the continued structural integrity of the fleet.

DATES: This AD is effective May 15, 2012.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of May 15, 2012.

ADDRESSES: For service information identified in this AD, contact Lockheed Martin Corporation/Lockheed Martin Aeronautics Company, Airworthiness Office, Dept. 6A0M, Zone 0252, Column P-58, 86 S. Cobb Drive, Marietta, Georgia 30063; telephone 770-494-5444; fax 770-494-5445; email ams.portal@lmco.com; Internet http://www.lockheedmartin.com/ams/tools/TechPubs.html. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Carl Gray, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, Georgia 30337; phone: 404-474-5554; fax: 404-474-5606; email: carl.w.gray@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on November 14, 2007 (72 FR 64005) (corrected December 3, 2007 (72 FR 67998)). That NPRM proposed to require revising the maintenance inspection program to include inspections that will give no less than the required damage tolerance rating for each structural significant item (SSI), doing repetitive inspections to detect cracks of all SSIs, and repairing cracked structure.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) and the FAA's response to each comment.

Support for the Proposed AD (72 FR 64005, November 14, 2007; Corrected December 3, 2007 (72 FR 67998))

Safair and Lockheed Martin Aeronautics Company (LM Aero) concurred with the proposed requirement to implement the Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2010 ("the SSID").

Lynden Air Cargo (Lynden) agreed that the SSID would provide an acceptable way to comply with the maintenance program requirements of the inspection procedures specified in section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a), which was superseded by section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109).

Request To Extend Comment Period

The SSID identified eight individual ADs that affect the principal structural elements (PSEs) identified in Section 4.0 (Principle Structural Elements) of the SSID. (The individual ADs are identified in the SSID in Section 2.0, Table 2.1, pages 2-3.) Lynden requested additional time to comment on the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to compare the compliance intervals and standards with those in the proposed AD, the individual ADs, and the continuous airworthiness maintenance program (CAMP). Lynden was unable to determine how the SSID addresses the existing ADs, and added that the proposed AD did not indicate that it would supersede the existing rules.

We reopened the comment period to allow additional time for operators to comment on the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)). We also provide the following clarification of the relationship among the various programs. The SSID can be used to show compliance for the baseline inspections for section 121.1109(c)(1) of the Aging Airplane Safety Rule (section 121.1109(c)(1) of the Federal Aviation Regulations (14 CFR 121.1109(c)(1)). This AD adds other more broad and specific inspections that supplement but do not conflict with other ADs. The SSID inspections should identify safety issues related to the PSEs. When a SSID inspection reveals a certain number of positive findings on a PSE, that part–and only that part–of the PSE will be removed from the SSID and addressed in an individual AD and associated service bulletin. The remainder of the PSE will remain in the SSID and will be subject to the SSID inspections only. If the problem area is not removed from the SSID, the SSID requirements still apply, but at a lower priority until the area is removed. We have not changed the final rule regarding this issue.

Request To Consider Industry Participation in Lockheed Working Group Sessions

The proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) stated that members of the airline industry participated with Lockheed in working group sessions and developed the Supplemental Structural Inspection Program (SSIP) for the affected airplanes, but Lynden reported that it was not consulted by the type certificate (TC) holder, and it was not aware of or invited to participate in any working group on this issue. Further, Lynden stated that it understood that the TC holder used military operational and design data for the basis of the SSID. Lynden, as the lead carrier for the Model L-382 Master Minimum Equipment List (MMEL) and the largest part 121 operator of the affected airplanes, would have provided valuable input on the civil operation and maintenance of the affected airplanes. Lynden requested that we consult the service difficulty report (SDR) database for the operator's submitted data regarding the structural inspection findings of the operator's CAMP.

According to Lynden, the SDRs ensure that the airplane is in an airworthy condition because fatigue cracks are found and reported before any adverse effect on airworthiness. The existing inspections in the CAMP reveal cracks based on existing inspection intervals, which, in most cases, are identical to the inspection intervals in the CAMP now being used by the operators. The SDRs also prove the accuracy of the evaluation by the FAA and design approval holder (DAH) of commercial usage (military usage for baseline structure is very similar to commercial usage), based on objective criteria and information submitted by the operators to the SDR database. Operators may request approval of an alternative method of compliance (AMOC) based on the existing CAMP.

The information in the SSID is based on military usage, which defined the baseline inspection requirements. Operators may be allowed to extend the inspection intervals by completing an operational usage evaluation (OUE) as specified in Lockheed Service Bulletin 382-57-84, and requesting approval of an AMOC from the FAA. Recent analysis of the usage data has shown that typical commercial operations of the affected airplanes are at higher payloads than military operations with significantly less time in training. Analysis and in-service cracking data have also shown that the crack growth rate severity of typical commercial usage is very similar to the baseline military usage. Therefore, the FAA's evaluation of commercial usage is based on objective criteria and information submitted by the operators. We have not changed the final rule regarding this issue.

Request To Withdraw the Proposed AD (72 FR 64005, November 14, 2007; Corrected December 3, 2007 (72 FR 67998)): No Unsafe Condition

Lynden noted that the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) was prompted by incidents involving fatigue cracking and corrosion in transport airplanes that are approaching or have exceeded their design service objective. The proposed AD was intended to maintain the continued structural integrity of the entire fleet of Model

382, 382B, 382E, 382F, and 382G airplanes. Lynden reported there have been no accidents involving fatigue cracking and corrosion relating to this type design on its airplanes. Lynden asserted that the program required by section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) ensures that such accidents will not happen. Lynden therefore questioned the conclusion that an unsafe condition even exists. Lynden alleged that we have not provided objective evidence of the unsafe condition in the affected airplanes, but have general concerns regarding aging airplanes. Lynden added that continued airworthiness of an airplane is ensured by the development of extensive inspection and maintenance programs. In Lynden's case, those maintenance requirements are detailed in an extensive CAMP, which has been proven to ensure the airworthiness of its fleet for over 97,000 flight hours.

We infer that Lynden was requesting that we withdraw the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), because no unsafe condition has been identified. We disagree. The DAH performed several full-scale fatigue tests on the Model L-382, and has developed a large data bank of service history (including SDRs) to identify problem areas and PSEs that provide objective evidence that an unsafe condition exists. The damage tolerance analysis (DTA) assessments established inspection intervals after many of the PSEs were identified. Initially the fatigue test and service history data were used only to identify the problem areas (i.e., PSEs) that were to receive DTA evaluation, and to validate the DTA data. Every PSE received a DTA assessment. As part of the assessment of each PSE, the DAH found that in some instances the DTA did not correlate well with the fatigue test and service life data. In these instances, the fatigue test and service life data were used to establish the inspection intervals that are specified in the SSID.

Lynden has developed an FAA-approved, operator-specific CAMP for its fleet in accordance with section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109) based upon the latest guidance and documents from the DAH. The latest guidance and documents from the DAH were provided in the Lockheed Martin Model L382, SMP 515-C-MASTER Report, dated November 2010. This document should already be incorporated into the operator's CAMP. Therefore, if the operator has been performing its CAMP as required, adequate information is available to perform the required inspections. The operator should already be in compliance with the SSID. If the operator has made changes to the CAMP to meet its maintenance schedules that were previously approved by the FAA, the subject operator may request approval of an AMOC to the SSID based on the existing CAMP, in accordance with the provisions of paragraph (q) in this final rule. If the AMOC is approved by the FAA, the operator will not need to change the CAMP except for minor changes provided in the SSID, and would already be in compliance with this AD except for the minor changes.

As discussed previously, the SSID addresses an identified safety issue on the affected airplanes and therefore must be mandated by an AD. The inspection requirements in the SSID are required for the continued safe operation of the aircraft. We have not changed the final rule regarding this issue.

Request To Withdraw the Proposed AD (72 FR 64005, November 14, 2007; Corrected December 3, 2007 (72 FR 67998)): Redundant With Existing Programs

Lynden asserted that it is already required to comply with the intent and scope of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) through accomplishment of the CAMP, which ensures the continued airworthiness of its fleet through constant analysis and surveillance. The CAMP and the improvements required through the CAMP procedures ensure that fatigue cracks will be detected before becoming critical. The CAMP will be used as the basis for compliance with section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) (which was superseded by section 121.1109(c)(1) of the Federal Aviation Regulations (14 CFR 121.1109(c)(1)). Lynden stated that the proposed requirements of the SSID are comparable to the requirements already imposed under section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a), and the proposed grace period will provide nearly the same timeline. Lynden noted that the proposed AD stated that fatigue cracking may increase as a result of transport airplanes reaching or exceeding their design service objective (DSO), and as a result of their increased

utilization and longer operation. Lynden asserted that the proposed AD would be redundant with the requirements for the SSIP, which are contained in section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a). Section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) already requires incorporation of FAA-approved damage-tolerance-based inspections into the maintenance program for aircraft structure susceptible to fatigue cracking for the airplane to continue operating after December 20, 2010.

Lynden was concerned that the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) will not establish compliance with section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) and will cause confusion and/or duplicative recordkeeping requirements regarding whether a particular inspection is acceptable for compliance. If the AD does establish compliance with section 121.370a of the Federal Aviation Regulations (14 CFR 121.380a), then it is unnecessary and redundant, since section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) will ensure the aircraft's structural integrity. On the other hand, if the AD does not establish complete compliance, section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) needs to be reviewed to ensure that it establishes the level of safety originally anticipated by the FAA. In either case, both requirements should not be needed to establish continuous structural integrity of the affected airplanes.

We infer that Lynden was requesting that we withdraw the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) as unnecessary because it is redundant with the CAMP or the requirements of section 121.1109(c)(1) of the Federal Aviation Regulations (14 CFR 121.1109(c)(1)). Some inspections were not included in the SMP-515-C inspection program, and some operators do not have the latest revision to this program, including the changes made by the SSID and required by this AD. So an AD is necessary to mandate the implementation of the SSID. Further, an AD would be necessary to ensure continued operational safety if a related operational rule is changed in the future. Except for some minor changes made by the DAH and approved by the FAA, any operator with a CAMP already meets the requirements of the SSID and this AD; no additional work would be required, and no alternative method of compliance would be necessary to demonstrate compliance. However, the SSID can also be used as a means to show compliance for the baseline inspections for the section 121.1109(c)(1) of the Federal Aviation Regulations (14 CFR 121.1109(c)(1)) (which superseded section 121.370a of the Federal Aviation Regulations (14 CFR121.370a). That rule requires operators to incorporate FAA-approved damage-tolerance-based inspections and procedures into the maintenance program for airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure on airplanes meeting the following criteria:

- Transport category airplanes
- Airplanes type certificated after January 1, 1958
- Turbine power airplanes
- Airplanes having a maximum type-certificated passenger seating capacity of 30 or more, or a maximum payload capacity of 7,500 pounds or more

Those airplanes must have FAA-approved damage-tolerance-based inspections and procedures incorporated into the maintenance program for airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure. The SSID meets this requirement for the affected airplanes. Therefore, no change to the final rule is necessary regarding this issue.

Requests To Revise Repair Approval

Safair, Lynden, and LM Aero requested that we change paragraph (n) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), which would have required repair "using a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA."

Safair requested that we instead require repair "in accordance with an FAA-approved method" to alleviate unnecessary burdens on both the Atlanta ACO and the operators.

Lynden noted that the preamble to the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) explained that the AD would allow the use of FAA-approved methods for the repair, but the proposed regulatory language would actually require each repair to be specifically approved by the ACO. Lynden requested that the preamble and regulatory language agree. Lynden believed that requiring approval for each repair is an unworkable and unacceptable regulatory burden for operators and the FAA. Lynden added that a typical Boeing SSID AD does not contain such an onerous paragraph, but allows cracked structure to be repaired in accordance with an FAA-approved method. Lynden added that the FAA's Transport Airplane Directorate has specifically promised to use the following language: "Cracked structure must be repaired prior to further flight in accordance with an FAA-approved method." If the suggested language is used, operators can perform repairs in accordance with previously acceptable methods, techniques, and practices that are based on approved data–whenever they find cracked structure, not just when performing inspections required by the AD. Lynden asserted that it is extremely important for the FAA to understand that an operator with an effective CAMP is constantly inspecting for structural integrity, not just when an AD requires an inspection. To ensure proper alignment with their responsibilities to ensure the continuous airworthiness of the affected airplanes, operators must not face conflicting, overlapping, or confusing compliance requirements.

LM Aero interpreted paragraph (n) in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) as a requirement to obtain an approval letter from the Atlanta ACO for every repair carried out on PSEs with cracks detected by the SSID inspections. LM Aero added that, in many cases, cracking detected by the SMP-515-C inspection procedures in the SSID can be repaired with existing FAA-approved repair procedures. Including the additional requirement to obtain specific approval letters for each repair is likely to place significant burden on both operators and the FAA. LM Aero requested that we revise paragraph (n) of the proposed AD to add the following provision:

> Existing FAA approved repair procedures that are applicable to repair the damage detected, such as FAA approved Lockheed Model 382 Series Service Bulletins (when so stated in the Service Bulletin) and the Lockheed Service Manual Publication SMP 583 Structural Repair Manual [SRM], do not require further approval.

Lynden concurred with LM Aero's comment.

We agree with the commenters' rationale. Accordingly, we have revised the final rule to add new Note 1 to paragraph (o) of this AD, which explains the source of guidance for repairing damage. We also added new Note 2 to paragraph (o) of this AD to explain that operators may contact the Manager, Atlanta ACO, for information regarding the use of published service data approved by the FAA for these repairs, as required by paragraph (n) of this AD.

Request To Revise Terminology: ''PSE'' vs. ''SSI''

LM Aero and Lynden requested that we revise the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to be consistent with the SSID, which uses the term "principle structural element (PSE)" instead of "structural significant item (SSI)."

We agree to standardize the terminology. The original term was "Structural Significant Item (SSI)." Although the two terms are currently used interchangeably, we agree to use the latest terminology in this AD. We have revised the final rule to replace "SSI" with "PSE."

Request To Revise Terminology: ''DTA Values'' vs. ''Inspection Intervals''

Lynden stated that neither the FAA nor the operators can ensure compliance with the AD without a clear understanding of how the DTA was conducted and without the required DTA values. If we were to accept LM Aero's inspection intervals as "DTA values," Lynden requested that we

revise the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to correspond with the SSID. Lynden noted, for example, that paragraph (g) of the proposed AD states, in part, "The required DTA value for each PSE is listed in the SSID." Lynden asserted that there are no DTA values or ratings listed in the subject SSID.

We partially agree. We agree to accept the DAH's inspection intervals (presented in the SSID as "DTA values"), and we have revised the final rule to correspond to the SSID by changing "DTA values" to "inspection intervals" throughout this final rule. We disagree that compliance with the AD cannot be ensured without clear understanding of how the DTA was conducted and without DTA values. The operator is required to set up a tracking system for each inspection and maintain that system at all times. The operator and the FAA can track the status of the inspections using inspection numbers assigned to each inspection requirement by the operator or they can track the inspections by the procedure/card number defined by the SSID document or any other procedure approved by the FAA. The DAH has given an adequate description of its DTA methodology in Section 5.0 (Damage Tolerance Analysis Methodology) of the SSID. This methodology should provide the operators an understanding of how the DTA was conducted. In addition, the FAA is familiar with the DAH's DTA procedures and has a good understanding of how the DTA was conducted. The FAA has reviewed and approved the DTA analysis and inspection intervals as approved in the SSID. This information cannot be released to the operators because it is the DAH's proprietary data. In addition, we have determined that operators do not need this information to do the SSID inspections.

Request To Revise Applicability: Exclude Airplanes Subject to Section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109)

LM Aero and Lynden requested that we revise the applicability of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to include only those airplanes on which the SMP-515-C inspection program has not been incorporated and the applicable service bulletins identified in the SSID have not been accomplished. Lynden added that, according to Section 2.0 (Introduction) of the SSID, some operators have not updated the SMP-515-C inspection program in many years, and some commercially certified aircraft in other countries may not have an SMP-515-C inspection program. Lynden noted that the TC holder issued the SSID only for those operators without a CAMP or an updated one, and the AD should therefore apply only to airplanes that are not subject to section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a).

We disagree to change the applicability. The SSID addresses a safety issue on all Model 382, 382B, 382E, 382F, and 382G airplanes as the specified unsafe condition is likely to exist on all of these products. The inspections in the SSID are necessary for the continued safe operation of all applicable aircraft, and must be mandated by an AD. If the operator has been performing the CAMP as required, the operator is in compliance with the SSID, except for the minor changes. We have not changed the final rule regarding this issue.

Request To Revise Applicability: Remove Airplanes With CAMPs

Lynden alleged that the SDR database is directly related to the specific inspections contemplated by the SSID and the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), and that the required reports are evidence that the FAA-approved part 121 CAMP is keeping the aircraft in an airworthy condition; i.e., defects are found and repaired before there is any adverse impact on airworthiness.

We infer that Lynden was requesting that we revise the applicability to remove airplanes with CAMPs. We disagree. The purpose of the SDRs is to help the FAA identify and address problem areas in the fleet before a catastrophic failure occurs. The SDRs are used to justify the inspection intervals in the SSID. The SDRs help maintain affected airplanes in an airworthy condition because the reports advise of fatigue cracks found before any adverse effect on airworthiness is encountered. The existing inspections in the CAMP reveal cracks based on existing inspection intervals. The

inspection intervals in the SSID are in most cases identical to the inspection intervals in the CAMPs now being used by operators. The SDRs also verify the accuracy of the FAA's and DAH's evaluations of commercial usage and are based on objective criteria and information submitted by the operators to the SDR database. Not all affected operators use a CAMP or have equal maintenance programs. Consequently, and based on the SDRs of Lynden and other operators, we have determined that the PSEs on the affected airplanes are a potential safety issue that needs to be addressed.

We have chosen to address this issue with an AD that will mandate the inspections provided in the SSID, through an FAA-approved SSIP. We intend to reduce the workload for the DAH, operators, and the FAA, and still accomplish the intent of the AD. The SSID meets the requirements for all Model 382, 382B, 382E, 382F, and 382G airplanes. Except for some minor changes made by the DAH and approved by the FAA, any operator with a CAMP is already in compliance with the SSID. If the inspections per the CAMP have been accomplished, except for the minor changes that may be incorporated into the program and accomplished as required, no additional work is required by the operator. If the operator has changed the CAMP to meet maintenance schedules previously approved by the FAA, the operator may request approval of an AMOC to the AD based on the existing CAMP. If an AMOC request is approved by the Atlanta ACO, the operator would not have to change the CAMP, except for minor changes, and would already be in compliance with this AD.

In summary, airplanes with CAMPs are in compliance because either (1) the initial inspection has been done in accordance with the CAMP or (2) the inspection is not yet due, in which case the inspection would be done in accordance with the SSID. But airplanes with CAMPs are still affected by the AD because the repetitive inspection intervals may not agree between the SSID and the CAMP. We have not changed the final rule regarding this issue.

Request To Clarify Applicability: Airplanes Identified in SSID AD vs. SSID

Lynden requested that Section 3.0 (Affected Aircraft) be removed from the SSID. Lynden asserted that an AD identifies the affected airplanes, and conflicting information in the SSID does not aid clarity.

We disagree with the request. Paragraph (c) in this AD identifies the affected airplanes, and the service documents identify the respective individual affected serial numbers. Where there are differences, the AD prevails. We have not changed the final rule regarding this issue.

Request To Clarify Applicability: U.S.- vs. Non-U.S.-Registered Airplanes

While the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) reported there are "91 airplanes of the affected design in the worldwide fleet," Lynden stated that the proposed AD would affect U.S.-registered airplanes only.

We agree to provide clarification. Lynden is correct that the AD affects U.S.-registered airplanes only. The quoted statement is from the Cost of Compliance section of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)). In that section, we report the number of affected airplanes operated worldwide, but provide the cost estimates for only U.S.-registered airplanes. All airplanes are identified in the AD; airplanes that are later added to the U.S. registry will also be affected by this AD. We have not changed the final rule regarding this issue.

Requests To Revise Compliance Time: Revise the Initial Compliance Time

LM Aero stated that the compliance times for the initial inspections specified in paragraph (h) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) provide operators with considerable time to implement inspection requirements that should already be in their inspection programs. LM Aero agreed that a grace period to initiate the inspections (36 months as specified in the proposed AD) might be necessary, but recommends against exceeding the "initial" interval plus one "recurring" interval by more than 12 months. LM Aero added that the

compliance times, including a grace period exceeding twice the "initial" interval on wing PSEs, would exceed the crack growth "Safety Limit" defined in Section 5.0 (Damage Tolerance Analysis Methodology) of the SSID, and would contravene the intent of section 25.571 of the Federal Aviation Regulations (14 CFR 25.571) and FAA Advisory Circular (AC) 91-56B, "Continuing Structural Integrity Program for Airplanes," dated March 7, 2008 (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/c41f92c5f55751a58625740800686473/$FILE/AC%2091-56B.pdf). LM Aero recommended the initial compliance times in the following table.

Recommended Compliance Time

Airplane status	Commenter's recommended compliance time
Has not exceeded the initial[1] threshold	Before the initial threshold plus 10 percent of the specified interval
Has exceeded the initial threshold	Before reaching the initial plus one recurring inspection interval, or within 36 months after the effective date of the AD, whichever occurs first
Has exceeded the initial threshold plus one recurring inspection interval	Within 12 months after the effective date of the AD, or before reaching twice the initial threshold, whichever comes first
Has exceeded twice the initial threshold	Before the next flight

[1] The "initial" threshold is specified in Section 6.3 of the SSID.

Lynden concurred with this comment.

We disagree with the requests to revise the compliance time. Most SSIDs provide operators 12 months to incorporate the inspections into the maintenance program. Then the compliance time starts for those inspections that have exceeded the threshold; otherwise the first inspection is due at the threshold. We have not changed the final rule regarding this issue.

Request To Revise Compliance Time: Extend Repetitive Interval for Sloping Longerons

LM Aero questioned the repetitive inspection intervals specified in paragraph (k) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) for the "Special Condition" of the sloping longeron at the fuselage station (FS) 1041 fitting (per Special Inspections card (SP) 113). LM Aero stated that the proposed 12-month interval would be too frequent and would add a significant burden on the operator to continually remove the FS 1041 fitting to perform the inspection. Furthermore, frequent repeated removal would likely result in excessive over-sizing of the holes, which would require replacement of the sloping longeron (FS 737 to 1041). The intent of this inspection is to provide an opportunity to inspect the longeron for stress corrosion cracking that is hidden under the FS 1041 fitting. Although stress corrosion cracks that have not propagated beyond the FS 1041 fitting do not affect the structural integrity of the longeron, they will eventually propagate out from under the fitting for which the SSID recommends replacement. The need to replace the FS 1041 fitting depends on crack findings during the task associated with SP-109–which will also detect relatively long stress corrosion cracks in the sloping longeron by the x-ray primary procedure No. 2. Lynden concurred with this comment.

For the reasons provided by LM Aero, we agree to revise the repetitive intervals, specified in paragraph (l) in this final rule, from 12 months to an interval that corresponds to the "Special Condition" inspection interval currently in the SSID, which requires the inspection when the FS 1041 fitting is replaced. Paragraph (l) in this final rule agrees with the SSID revision for the inspection requirements for PSE 53-50-13.

Request To Remove Repetitive Inspection Requirement for ''Special Conditions''

LM Aero asserted that the intent of the SSID "Special Condition" inspections is to provide an opportunity to perform an enhanced inspection of the applicable PSE during another unscheduled maintenance action–typically, the removal of a component or structural part. LM Aero recommended against mandatory scheduled intervals for these inspections, because of the potential for associated damage from repetitive part removal and replacement. LM Aero agreed that the inspections should be done in accordance with paragraph (j) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), if none of the "Special Condition" inspections are part of an operator's maintenance program. Lynden concurred with this comment.

We agree that the subject inspections should be done only when the part is removed for scheduled maintenance–not at regular intervals. The inspection area is a PSE but not a problem area. The inspection requires removing parts, and continually removing the part for inspection will result in excessive damage to the airplane structure compromising the use and value of the inspection. The current schedule is adequate to maintain safety. Because more damage will be done by removing the parts to do the inspection, we have changed this final rule to refer to the exceptions noted in paragraph (j) of this AD to agree with the provisions of the SSID.

Request To Revise Compliance Time: Extend Repetitive Interval for Aft Engine Mount

LM Aero also questioned the repetitive inspection interval specified in paragraph (m) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) for the "Special Condition" inspection of the aft engine mount beam (SP-190). LM Aero stated that the proposed 24-month interval would result in a significant burden on the operator to remove the aft engine mount to do the inspection. This inspection is intended to provide an enhanced procedure for detecting cracking of the aft mount beam normally hidden by the lord mount. The aft lord mount does not have a scheduled removal time, and replacement is based on the condition found (cracks in the rubber mounts). The inspections associated with SP-189 performed at 24-month intervals will detect cracking in the aft mount beam that extends beyond the lord mount. Lynden concurred with this comment.

We agree, for the reasons provided by the LM Aero. The proposed compliance time could also result in excessive hole over-sizing, requiring replacement of the steel beam. We have revised paragraph (n) of this final rule to require the repetitive inspection interval as specified in the SSID when the aft lord mount is replaced. Paragraph (n) in this final rule agrees with the revision in the SSID for the inspection requirements for PSE 71-10-03.

Request To Revise Compliance Time: Allow Changes to Intervals Based on Findings and Design Changes

Lynden stated that Section 5.0 (Damage Tolerance Analysis Methodology) of the SSID presents two steps: (1) Incorporating the methodology for assessing/analyzing each PSE listed in Section 4.0 (Principle Structural Elements) that validates the assigned DTA value; and (2) implementing inspection intervals established for each PSE based on the DTA and the value assigned. During the actual accomplishment of the PSE inspections, findings are evaluated to determine whether the results are within the anticipated safety limits, i.e., within assigned values. When implemented, this requirement would provide a methodology to allow adjustments to the inspection intervals based on findings, changes in design, and implemented repairs and alterations.

We infer that Lynden was requesting that we revise the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to allow for adjustments to the inspection intervals based on the suggested criteria. We disagree. Section 5.0 (Damage Tolerance Analysis Methodology) of the SSID clearly describes the DTA and methodology, and Section 6.0 (Structural Inspection Requirements) of the SSID clearly specifies the required inspection intervals for each

PSE. As previously stated we have evaluated the document and supporting data, and have established that the methodology presented in the SSID will ensure that the identified unsafe condition will be corrected. All the information that the operator needs to incorporate into the maintenance inspection program is the inspection procedures and the inspection intervals, in Section 6.0 (Structural Inspection Requirements) of the SSID. The discrepancy reporting requirements specified in Section 7.0 (Discrepancy Reporting) of the SSID must also be included. The DTA Methodology in Section 5.0 (Damage Tolerance Analysis Methodology) of the SSID provides the basic information needed to develop the inspection intervals provided in Section 6.0 (Structural Inspection Requirements) of the SSID. The inspection intervals are already provided, so operators do not need the detailed analysis. By incorporating inspection intervals provided in Section 6.0 (Structural Inspection Requirements) of the SSID, the operator is already in compliance with Section 5.0 (Damage Tolerance Analysis Methodology) because the intervals were based on Section 5.0 (Damage Tolerance Analysis Methodology). This AD does not allow adjustments to the inspection intervals without FAA approval. Operators may request AMOCs for this purpose in accordance with procedures specified in paragraph (q) of this AD.

Request To Revise Compliance Time: Require SSID Incorporation by Certain Date

Lynden requested that we revise the proposed compliance time to a specific date, such as December 2010–for the pending DTA requirements in section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a).

We partially agree. December 20, 2010, is the date by which operators must incorporate an inspection program into their maintenance program to address the baseline structure inspections required by the Aging Aircraft Safety Rule (14 CFR 121.1109, "Supplemental Inspections"). Operators may either use the SSID or incorporate their own FAA-approved inspection program for baseline structure. Lockheed has agreed, once the AD is issued, to provide operators that have incorporated certain inspections into their maintenance program with a revision of Lockheed Service Manual SMP-515-C that includes the SSID requirements. Therefore, most if not all operators have complied with this AD by that date, with no additional work required of operators. We have not changed the final rule regarding this issue.

Request To Revise Compliance Time: Match CAMP's Inspection Intervals

Lynden questioned whether operators will be able to comply with the proposed requirements in the proper timeframe, adding that several proposed inspection intervals would be problematic. Lynden emphasized that the CAMP's intervals have ensured the structural integrity of its fleet for 97,000 flight hours of civil operation in the most difficult civil operating conditions envisioned by the type design. Lynden observed that the proposed inspection intervals are slightly shorter than those established by Lynden's CAMP, and suggests that changing these intervals could introduce the potential for maintenance error, with possible harmful results. Lynden stated that the proposed AD must correspond with its CAMP to ensure compliance and structural integrity without unnecessary duplication and cost.

We infer that Lynden was requesting that we revise the proposed inspection intervals to match those in its CAMP. We disagree. In developing an appropriate compliance time for this AD, we considered the practical aspect of accomplishing the inspections within intervals of time that correspond to typical scheduled maintenance for affected operators. But since the various operators have different maintenance schedules, we could not provide optimal schedules for each operator in the AD. As previously explained, operators who perform the CAMP as required should already be in compliance with the SSID, except for the differences noted. Operators with FAA-approved revisions to their CAMP to meet maintenance schedules may request an AMOC to the AD, in accordance with the provisions of paragraph (q) of this AD, based on the existing CAMP to adjust the maintenance

schedule, provided no interval exceeds the DTA-established inspection intervals mandated by the AD and presented in the SSID. We have not changed the final rule regarding this issue.

Request To Revise Compliance Time: Extend Time To Incorporate SSID

Lynden was concerned that the compliance times in the SSID and the AD do not contain the exact same language. Determining exact compliance is essential to an operator's efficient and effective management of ADs. Lynden requested additional time to ensure that its current CAMP establishes compliance with the AD, which will in turn comply with section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109). Lynden has already worked with its Principal Aviation Safety Inspector (PASI) to ensure that its program can comply with the requirements of section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109) and the December 2010 deadline. Lynden has followed FAA Advisory Circular (AC) 120-93, "Damage Tolerance Inspections for Repairs and Alterations," dated November 20, 2007 (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/f73fd2a31b353a71862573b000521928/$FILE/AC%20120-93.pdf), regarding the actual accomplishment and implementation of the section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) program. The operator's PASI has agreed to the carrier's phased approach and will ensure the following:

1. The maintenance program for the airplane includes FAA-approved damage-tolerance-based inspections and procedures for airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure. These inspections and procedures account for the effects of adverse repairs, alterations, and modifications on fatigue cracking of airplane structure.

2. The Atlanta ACO has approved the damage-tolerance-based inspections and procedures, including any revisions. Lynden has already included the SSID's damage-tolerance-based inspections and procedures in its CAMP.

We agree with the request to revise the compliance time in this AD. As stated previously, we have changed the compliance time of paragraph (g) of this final rule to 12 months after the effective date of the AD for operators to incorporate the requirements of the SSID into their maintenance program. Lynden has a CAMP, and the latest guidance and documents from the DAH should already be incorporated into the operator's CAMP. So operators performing their CAMP as required already have the necessary information to perform these inspections. The operator should already be in compliance with the SSID so it should not be necessary to revise the compliance time. If the operator has made changes to the CAMP to meet its maintenance schedules that were previously approved by the FAA, the subject operator may request an AMOC based on the existing CAMP; if the AMOC is approved by the FAA, the operator will not have to change the CAMP, and they would already be in compliance with this AD, except for the minor changes.

Request To Clarify Compliance Times (DTA Initial Values)

Lynden questioned how operators will know how to comply with paragraph (g) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), since the SSID provides a methodology for accomplishing the DTA but does not assign the initial values (compliance times).

We disagree that the SSID does not assign the initial values. The initial and repetitive inspections are provided in Section 6.0 (Structural Inspection Requirements) of the SSID, along with a reference to the inspection procedure for each PSE. Paragraph (g) of this AD requires operators to incorporate the information in the SSID (inspection intervals and procedures) into their maintenance inspection programs within 12 months. Paragraph (i) of this AD specifies the compliance time for accomplishing the initial inspections. We have not changed the final rule regarding this issue.

Request To Revise Cost Estimate: Cost for SSID Incorporation Is for the Fleet, Not per Airplane

LM Aero noted that the estimated cost of implementing the AD applies to operators that do not currently follow the Model 382 SMP-515-C inspection program. To LM Aero's knowledge, all U.S. operators currently use this program (although it is not yet mandated by the FAA), and the latest revision includes the intent of the SSID. Revising the maintenance program therefore should be considered a one-time effort of 600 hours for the entire fleet (not per airplane). Lynden concurred with this comment.

We agree. The proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) inadvertently stated that revising the maintenance program would take 600 work hours per airplane. We have revised the Costs of Compliance section of this final rule accordingly.

Request To Revise Cost Estimate: Include Work Hours for Recordkeeping

Lynden stated that the estimated costs specified in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) do not include the additional recordkeeping requirements necessary to comply with the AD. Lynden owns and operates six of the affected airplanes, all under part 121 and all under a program developed to comply with section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a). Lynden noted that operators must report structural issues under the SDR rules as well as reporting findings to the TC holder in accordance with the AD. This duplicative action must take place at the time of the inspections and repairs so that the airplane can be approved to return to service and accomplishment with the AD requirements can be recorded.

We infer that Lynden was requesting that we revise the cost estimate in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to include additional time for recordkeeping. We disagree. Based on the best data available, the manufacturer provided the number of work hours necessary to do the basic required actions. This number represents the time necessary to perform only the actions actually required by this AD. We recognize that, in doing the actions required by an AD, operators might incur incidental costs in addition to the direct costs. The cost analysis in AD rulemaking actions, however, typically does not include incidental costs such as the time required for recordkeeping or other administrative actions. Those incidental costs, which might vary significantly among operators, are almost impossible to calculate.

Further, the SSID requirements are already part of the maintenance program, so if the inspections have been done as specified in the SSID, no additional work is required. Most of the information required by the SSID will be identical to the SDRs except for some minor changes. To simplify the reporting requirements, operators may use one report for both the SSID inspections and the SDRs. For these reasons we find that there will be very little additional cost for recordkeeping once the maintenance program is revised to incorporate the SSID requirements. We have not changed the final rule regarding this issue.

Request To Revise Cost Estimate: Account for Duplicate Inspections

The Cost of Compliance section in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) explained the following:

> The number of inspection work hours * * * is presented as if the accomplishment of the actions in this proposed AD [(72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998))] are to be conducted as "stand alone" actions. However, in actual practice, these actions for the most part will be done coincidentally or in combination with normally scheduled airplane inspections and other maintenance

program tasks. Therefore, the actual number of necessary additional inspection work hours will be minimal in many instances. * * *

Lynden alleged that this is not true for its current program, and that if the AD is issued as proposed, Lynden would be required to duplicate inspections to comply with its program and the AD.

We infer that Lynden was requesting that we revise the cost estimates in this AD. We disagree. Each operator's inspection schedule will be different, and we cannot account for the individual costs incurred by each operator. We have not changed the final rule regarding this issue.

Request To Revise Cost Estimate: Account for Discrepancies Between AD and SSID

Lynden contended that the cost estimates specified in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) would be more accurate if we reconcile the differences between the AD and the SSID. Lynden asserted that the estimated costs are based on the assumption that the proposed inspection intervals were in line with the inspection intervals already used by air carriers. Lynden stated that these intervals do not align and would add scheduling complexities and associated costs for the operators. Lynden requested that we revise the proposed AD based on Lynden's estimated costs, since Lynden operates the most affected airplanes.

We disagree with the request to revise the cost estimate. Where safety considerations allow, we try to set compliance times that generally coincide with operators' maintenance schedules. But since schedules vary substantially, we cannot accommodate each operator's optimal scheduling in each AD. Therefore, we do not consider it appropriate to attribute to the AD the costs associated with the type of special scheduling that might otherwise be required. Each AD does allow individual operators to request approval to adjust the compliance time via an alternative method of compliance, based on data showing that the adjustment will not adversely affect safety. In any event, any compliance time adjustments would have little effect on costs since most of the inspections already align with each operator's maintenance program. We have not changed the AD regarding this issue.

Request To Address Imprecision in SSID

Lynden objected to the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) incorporating the SSID "by reference" because the SSID is not precisely written. Lynden alleged that other supplemental structural inspection documents adopted through ADs clearly delineate the methodology used to develop the requirements for determining the structural elements and the inspection intervals. Lynden stated that those documents also clearly lay out the damage tolerance values for each element. Lynden added that Section 5 (DTA Methodology) is not like the sections of other SSIDs referenced in other ADs. Those SSIDs clearly establish the DTA methodology and the DTA value assigned to each SSI. Lynden added that such clarity is necessary for appropriate changes to the maintenance program and for the assignment and continued evaluation of the inspection intervals implemented under that program.

Lynden made no specific request to change the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), but we provide the following explanation to address Lynden's concerns.

We disagree with the assertion that the SSID is not precisely written. As explained previously, an operator's CAMP is based on the latest guidance and documents from the DAH, as provided in the Lockheed Martin Model L382 SMP 515-C-MASTER Report, dated November 2010.

We also disagree that the SSID does not clearly delineate the methodology used to develop the requirements for determining the PSEs and the inspection intervals. Section 4.0 (Principle Structural Elements) of the SSID provides enough information for operators to determine how the PSEs were developed. Sections 4.0 (Principle Structural Elements) and 8.0 (Inspection Zone Description) also provide enough information to identify each PSE and its location on the aircraft by zones. Section 5.0 (Damage Tolerance Analysis Methodology) clearly explains the DTA methodology, and Section 6.0

(Structural Inspection Requirements) clearly states the required inspection intervals (damage tolerance values) for each of the PSEs. Further, operators have already incorporated into the CAMP the inspection procedures required to perform the SSID inspections on SP cards (special inspection cards) and ST cards (structural inspections cards). The operators have not advised of any concerns about these inspections, and therefore must be following the procedures to perform the inspections without difficulty. The inspection procedure/card number to be used for each inspection is clearly identified in the first column of the table in Section 6.0 (Structural Inspection Requirements) of the SSID. Also, the required inspection intervals (assumed to be the damage tolerance values referenced in the comments) are clearly defined in the fourth and fifth columns of the table in Section 6.0 (Structural Inspection Requirements) of the SSID. Operators are required to set up a tracking system for each inspection, and to maintain that system at all times. Operators and the FAA can track the status of the inspections using inspection numbers assigned by the operator to each inspection requirement, or operators can track the inspections by the procedure/card number defined by the SSID document or any other procedure approved by the FAA.

We have reviewed and approved the DTA and inspection intervals as approved in the SSID. This information is the DAH's proprietary data, and we cannot release it to the operators. Further, operators do not need this information to accomplish the SSID requirements.

Each manufacturer's SSID is different, and each DAH has a different approach regarding methods for developing the data, information they need to provide to accomplish the required inspections, and reporting procedures. The different overseeing ACOs also have authority to approve whatever data they deem necessary to meet the requirements of the AD, provided the data meet the intent of the FAA regulations, policies, and guidance materials. We find that the SSID meets those requirements.

We have not changed this final rule regarding these issues.

Request To Address General Differences Between AD and SSID

Lynden was concerned about differences noted between the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) and the SSID, and made several assertions based on these alleged differences.

1. The SSID's stated purpose is to capture a point in time to help civil operators establish compliance with section 121.1109(c)(1) of the Federal Aviation Regulations (14 CFR 121.1109(c)(1)).

We partially agree with Lynden's position. The SSID inspections are necessary for the continued safe operation of the affected airplanes, and therefore must be mandated by an AD. However, the SSID can also be used to show compliance for the baseline inspections for the Aging Airplanes Safety Rule (14 CFR 121.1109(c)(1)). That rule requires operators to incorporate FAA-approved damage-tolerance-based inspections and procedures into the maintenance program for airplane structure susceptible to fatigue cracking that could contribute to a catastrophic failure on airplanes meeting the following criteria:

- Transport category airplanes.
- Airplanes type certificated after January 1, 1958.
- Turbine power airplanes.
- Airplanes having a maximum type-certificated passenger seating capacity of 30 or more, or a maximum payload capacity of 7,500 pounds or more.

The SSID meets the requirements for the affected airplanes.

2. Section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109) is tied to the operator's CAMP, which can be continually adjusted, with FAA approval, to accommodate improvements in design, production, maintenance, and operations. Lynden added that an AD is "carved in stone" and may be changed only through an AMOC or a superseding AD, which require expenditures of time and money by the operator, the DAH, and the FAA.

We partially agree with Lynden. Because the subject regulation is tied to each operator's CAMP, which may be adjusted to accommodate such improvements, we required the DAH to develop a separate document–the SSID–and have mandated its incorporation by this AD, so that the inspection requirements in the SSID cannot be revised by the operator without approval by the Atlanta ACO. The inspection program may be incorporated into operators' maintenance programs in one of two ways: (1) By developing a separate maintenance inspection document that stands alone and requires that only those instructions in the SSID be accomplished in accordance with the AD, or (2) by incorporating the SSID inspections into the existing maintenance program. Either method is approved for the SSID AD, because they are both considered part of an operator's maintenance program. As Lynden noted, those inspections can then be changed only by an AMOC approved by the FAA, or by a revision to the SSID followed by a new or superseding AD that mandates the new requirements.

3. The SSID is adequate for its stated purpose, but it does not provide the certainty and objectivity required to be incorporated into a rule.

We disagree that the SSID lacks certainty and objectivity. As previously explained, the inspection intervals and procedures are clearly identified in Section 6.0 (Structural Inspection Requirements) of the SSID, and the PSEs are identified in Section 4.0 (Principle Structural Elements). And, if the operator has been performing the CAMP as required, adequate information is available to perform the required inspections, and the operator should already be in compliance with the SSID except for the noted changes.

No change is necessary in this final rule to address these assertions.

Request To Address Additional Differences Between AD and SSID

Lynden asserted that the SSID is inadequate, and will need considerable revision and additions to satisfy the intent and purpose of FAA Advisory Circular (AC) No. 91-56, "Supplemental Structural Inspection Program for Large Transport Category Airplanes," dated May 6, 1981 (now 91-56B, dated March 7, 2008). Lynden was concerned that it will need an AMOC immediately to establish compliance with the intent of the AD. Further, the AD changes the SSID in significant portions. Lynden stated that, to ensure proper compliance, the SSID must align properly with the proposed requirements of paragraphs (k) through (m) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)).

Lynden also requested that we ensure that Section 6.0 (Structural Inspection Requirements) of the SSID and paragraphs (h) through (m) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) match exactly. Reconciling these differences would (1) ensure that any changes to the SSID can be quickly reconciled with the final rule and any unique air carrier requirements; (2) ensure that an appropriate AMOC can be approved by the FAA without unnecessary explanation or confusion; (3) allow the original equipment manufacturer itself to apply for an AMOC to change the DTA and/or assigned values based on design changes; and (4) enhance compliance.

We agree with the request and made the requested revisions (in paragraphs (j) through (n) in this final rule) to ensure that the requirements of the AD align with the SSID accordingly. We agree that the SSID must align with the AD, but the AD is the prevailing source and we have determined these intervals to be appropriate.

Request To Clarify Section 6.0 (Structural Inspection Requirements) of SSID

Lynden requested that we account for conflicts and confusing information in Section 6.0 (Structural Inspection Requirements) of the SSID:

> The inspection intervals provided in this Section should be taken as the minimum required intervals for a typical cargo transport operational usage with average payloads not exceeding 20,000 lbs. For routine carriage of cargo in excess of 30,000

> lbs, the inspection intervals for wing lower surface PSEs should be reduced by a factor of 2. * * * In no circumstances should the operator extend these inspection intervals without having completed an LM Aero Operational Usage Evaluation and obtaining FAA approval for an updated SMP 515-C inspection program.

Lynden asserted that there is no definition of the term "routine," and no requirement for deviations if the operator has obtained an OUE. Lynden questioned whether an operator with an FAA-approved program developed to comply with section 121.370a of the Federal Aviation Regulations (14 CFR 121.370a) would need an AMOC to comply with the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)). Lynden further questioned whether an operator would have an automatic AMOC if it completed an OUE and obtained FAA-approval of the updated inspection program through its local Flight Standard District Office (FSDO). Lynden was concerned about potential conflicts and confusion between the SSID and the proposed AD, and notes a specific example of confusing information, where Section 6.3 of the SSID includes the caveat of "later than +10% of the specified interval." Lynden questioned whether this indicates that the proposed AD would allow the addition of 10% to all intervals without additional approval.

We agree to provide clarification. In this AD, "routine" refers to typical cargo transport operational usage with an average payload of 30,000 pounds, rather than the defined typical usage of 20,000 pounds; in that case the inspection intervals should be reduced by a factor of 2.

AMOCs are never automatically approved. The operator must substantiate, and we must approve, any AMOC for a different compliance method or compliance time not specifically identified in the AD. The OUE and the +10% extension have not been evaluated or approved by the FAA, so these may not be approved as AMOCs to this AD without further substantiation that these methods provide an equivalent level of safety. Further, the OUE will vary from operator to operator, so we must review each AMOC on a case-by-case basis in lieu of including this information in this AD. We have not changed the final rule regarding this issue.

Request To Address Errors in SSID and Clarify Use of References in AD

Lynden noted certain errors and omissions throughout the SSID, including references to certain documents.

We infer that Lynden was requesting that we revise the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to explain and correct the noted errors in the SSID. We disagree with the request, and we disagree that the SSID contains errors that would affect compliance with the requirements of this AD. In the SSID, the PSEs are clearly identified in Section 4.0 (Principle Structural Elements), and the locations and inspection requirements are clearly identified in Sections 6.0 (Structural Inspection Requirements) and 8.0 (Inspection Zone Description), and these cannot be changed without FAA approval. All the information necessary to accomplish the AD is in Sections 4.0 (Principle Structural Elements), 6.0 (Structural Inspection Requirements), 7.0 (Discrepancy Reporting), and 8.0 (Inspection Zone Description) of the SSID, a stand-alone document. Lynden notes that Section 4.0 (Principle Structural Elements) omits Chapter 52, the PSEs, which are required to comply with Section 6.0 (Structural Inspection Requirements), but there are no SSID PSEs for the doors in Chapter 52. The two PSEs identified in Section 6.0 (Structural Inspection Requirements) in Chapter 52 are actually located on the fuselage and not on the doors, so those PSEs are listed under Chapter 53 in Section 4.0 (Principle Structural Elements). Those PSEs are referenced in Chapter 52 in Section 6.0 (Structural Inspection Requirements), because they are part of the door surround structure. We have not changed the final rule regarding this issue.

Request To Verify Compliance With Section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109)

Lynden suggested that the SSID was based on a menagerie of methodologies to determine the inspection intervals, and that the proposed changes to these intervals are based on an unclear understanding of the original analysis. Neither the intervals proposed by the SSID nor the changes proposed in paragraphs (i) through (m) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) can be tracked to a clear, concise, objective DTA evaluation–as required by paragraph (g) of the proposed AD. The proposed AD stated that compliance with the AD including the SSID establishes compliance with section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109). Lynden requested that we restate this in the final rule.

We partially agree with Lynden. We agree to restate that compliance with the AD establishes compliance with section 121.1109(c)(1) of the Federal Aviation Regulations (14 CFR 121.1109(c)(1)). We have revised this final rule accordingly by adding this information in new Note 3 to paragraphs (g) through (p) of this AD. But we disagree that changes to the inspection interval are based on an unclear understanding of the original analysis. We have previously described the different bases for the SSID, and have explained that all the inspection intervals were originally established using a DTA. We might consider different intervals through requests for AMOCs if the service history data, fatigue test results, or risk analysis does not correlate well with the DTA, or if service history shows no discrepancies in the PSE inspection area following inspections as directed by the SSID. And we might consider different intervals to a calendar schedule if discrepancies exist within a given time period regardless of the aircraft usage, or to fit the operator's maintenance program schedule (although that interval cannot exceed the interval established by a DTA). Changes in inspection intervals must be substantiated by fatigue testing and extensive service history. We might consider a different DTA-based inspection, based on existing data. Or we might consider a different DTA-based inspection interval if a risk analysis shows an extremely low probability of fatigue damage occurring.

Request To Address Differences Between This (SSID) AD and Individual ADs

Lynden was concerned that Table 2.1 on page 2-3 of the SSID might conflict with the various requirements of the individual ADs identified in the SSID and the proposed inspection intervals of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) or the requirements of section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109). Lynden stated that the individual ADs must be reconciled appropriately, superseded as appropriate, to ensure continued compliance.

We disagree that it is necessary to revise this final rule. This AD adds inspections that supplement but do not conflict with other ADs. The SSID inspections will identify safety issues related to the PSEs. When a SSID inspection has a certain number of positive findings on a PSE, then that part of the PSEs will be removed from the SSID and addressed in an individual service bulletin and associated AD. The rest of the PSEs will remain in the SSID and will be subject to the SSID inspections only. We have not changed the final rule regarding this issue.

Request To Address Differences in PSEs Identified in SSID and Customer-Specific Programs

Lynden stated that the last sentence of the second paragraph of Section 4.0 (Principle Structural Elements) of the SSID clearly indicates that the inspection intervals derived from the analysis for the United States Air Force have already been incorporated into operator-specific "SMP-515-C-X Hercules Series Inspection Programs." Lynden requested that we revise the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to reconcile the PSEs identified in Section V of the customer-specific SMP-515-C-X inspection programs that have been

"superseded" by the PSEs identified in the SSID. In further support of its request, Lynden has provided the FAA with its analysis of the SSID against its FAA-approved program (SMP-515-C-113). The analysis revealed few, but significant, differences.

We agree that the information in the SSID is based on military usage, which was used to define the baseline inspection requirements. As explained previously, analysis and in-service cracking data have shown that the crack growth rate severity of typical commercial usage is very similar to the baseline military usage. Our evaluation of commercial usage is therefore based on objective criteria and information submitted by the operators. As stated previously, we accept the DAH's inspection intervals presented in the SSID as "DTA values," and have revised this final rule to change "DTA values" to "inspection intervals" to correspond to the SSID.

But we disagree that the differences are significant. The DAH carefully reviewed and evaluated the operator's maintenance program, and considered the civilian usage of the affected airplanes. Our intent is to reduce the workload of the DAH, operators, and the FAA, and still accomplish the intent of the AD. The SSID meets the requirements for the affected airplanes. Except for some minor changes made by the DAH and approved by the FAA, any operator with a CAMP is already in compliance with the SSID, except for the minor changes. The SSID requirements are already a part of the operators' maintenance programs. If the operator has made changes to the CAMP to meet its maintenance schedules that were previously approved by the FAA, the subject operator may request an AMOC to the SSID based on the existing CAMP. If this is approved by the FAA, the operator will not have to change the CAMP, and would already be in compliance with this AD except for the minor changes in the SSID.

Request To Address Differences Between This AD and AD 92-10-14, Amendment 39-8249 (57 FR 21727, May 22, 1992), and AD 75-17-04, Amendment 39-3185 (43 FR 16151, April 17, 1978)

Lynden suggested that we revise the proposed compliance times in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), in light of two related existing ADs, to avoid duplicative or contradictory results.

AD 92-10-14, Amendment 39-8249 (57 FR 21727, April 22, 1992), affects certain Lockheed Model 382 airplanes and addresses fatigue cracking. That AD requires inspections at intervals not to exceed 3,600 flight hours, in accordance with SP-126 and SP-224. Lynden reported being in compliance with that AD at its scheduled C check interval of 2,800 flight hours. The initial compliance times in the SSID are 1,800 flight hours for SP-126 and 3,600 flight hours for SP-224.

AD 75-17-04, Amendment 39-2300 (40 FR 32827, August 5, 1975), as revised by Amendment 39-3185 (43 FR 16151, April 17, 1978), affects certain Lockheed Model 382 series airplanes and addresses cracking on main frames. That AD requires inspections at intervals not to exceed the "C check" (which corresponds to 2,800 flight hours for Lynden), in accordance with SP-95, which is required at intervals not to exceed 1,200 flight hours in accordance with the SSID. Lynden reported being in compliance with AD 75-17-04 at 1,400-flight-hour intervals, at B-2 and C checks.

We disagree that it is necessary to change the compliance times in this AD. The inspection requirements of AD 92-10-14, Amendment 39-8249 (57 FR 21727, May 22, 1992); and AD 75-17-04, Amendment 39-3185 (43 FR 16151, April 17, 1978); as well as the other ADs identified in the SSID, do not conflict with this AD. We have not changed the final rule regarding this issue.

Request To Clarify Basis for SSID Inspections

Lynden found no objective evidence that the inspections are based on clear objective damage tolerance evaluations. Lynden noted that the SSID was drawn from existing programs and the inspection areas were validated by "full scale fatigue test and service corrosion and cracking data." Lynden added that the DAH understands that the maintenance program must be based on FAA-approved DT-based structural inspection procedures, but the fourth paragraph of Section 2.0

(Introduction) of the SSID reveals that the information is based only in part on damage tolerance assessments.

We infer that Lynden was requesting clarification of the basis for the inspection procedures. The information in the SSID comes from several sources. On affected airplanes, the DAH performed several full-scale tests and has developed a large data bank of service history (including SDRs) to identify problem areas and PSEs. A DTA was performed to establish the inspection intervals after many of the PSEs had already been identified. Initially, the fatigue test and service history data were used only to identify the problem area PSEs to receive DTA evaluation, and to validate the DTA data. Every PSE received a DTA. As part of the assessment of each PSE, the DAH found that in some instances the DTA did not correlate well with the fatigue test and service life data. In those instances, the fatigue test and service life data were used to establish the inspection intervals that are presented in the SSID. We have not changed the final rule regarding this issue.

Request To Clarify Use of Military Data as Basis for the SSID

According to Sections 1.0 (Purpose) and 2.0 (Introduction) of the SSID, data used by the DAH were based on information from military usage. Lynden concluded that the FAA's evaluation of commercial usage does not appear to be based on objective criteria or on information submitted to the SDR database sufficient to determine whether the "crack growth rate severity of typical commercial usage is similar to the baseline military usage, particularly in wing lower surface structure." Lynden found nothing in the AD docket indicating whether the DAH or the FAA evaluated the findings of commercial operators.

We agree that the SSID is based in part on military usage, which was used to define the baseline inspection requirements. Recent analysis of the usage data has shown that typical commercial operation of the affected airplanes is at higher payloads than that of military operations with significantly less time in training. Analysis and in-service cracking data have also shown that the crack growth rate severity of typical commercial usage is very similar to the baseline military usage. Our evaluation of commercial usage is therefore based on objective criteria and information submitted by operators. We have not changed this final rule regarding this issue. The DAH has advised that the recommended inspection intervals might be extended if operators complete an OUE and request AMOC approval.

Request To Clarify SSID Basis

Paragraph (g) of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) would require incorporation of a revision into the maintenance inspection program that provides no less than the required damage-tolerance rating for each PSE listed in the SSID. Lynden noted however that the SSID does not provide damage-tolerance ratings (as published in Boeing SSIDs), and provides only inspection intervals for SPs that are already part of the CAMP. And the required reports have not been incorporated into the findings or reassessment by the TC holder or FAA.

We agree to provide clarification. Each manufacturer's SSID is different. And each DAH has a different approach regarding collecting the data, implementing the required inspection, and reporting the results. Boeing used a damage tolerance rating procedure for its SSID program; Lockheed chose a different method. We accept both methods. The different oversight ACOs also have authority to approve whatever data they deem necessary to meet the requirements of the AD, as long as the data meet the intent of the FAA regulations, policies, and guidance materials. We have determined that the SSID meets those requirements. We have not changed the final rule regarding this issue.

Request To Clarify Purpose of Section 4.0 (Principle Structural Elements) of the SSID

Lynden stated that Section 4.0 (Principal Structural Elements) of the SSID seems to be the list of PSEs required by the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), yet there is no specific reference to that section, and that section does not contain the required DTA values.

We agree to provide clarification. Section 4.0 (Principle Structural Elements) of the SSID simply links the PSE number with a description of the PSE. Section 4.0 (Principle Structural Elements) identifies and defines the individual PSEs by zones of the airplane. The required DTA values or inspection intervals are presented in Section 6.0 (Structural Inspection Requirements) of the SSID. We have not changed the final rule regarding this issue.

Request To Require Inspections in Service Bulletins Instead of SSID

Lynden stated that the actions proposed in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) would increase recordkeeping complexity without equally enhancing safety. Since the SP cards listed in the SSID are already a mandatory part of the CAMP, Lynden requested that we issue an AD that requires accomplishment of the specific structural service bulletins already issued by the TC holder and incorporated into Lynden's inspection program, instead of the SSID inspections. Lynden suggested this as a better, less complex method of ensuring continued structural integrity.

We disagree with the request. Any operator with a CAMP is already in compliance with the SSID, except for the minor changes noted previously. Furthermore, mandating accomplishment of those service bulletins would necessitate issuing a supplemental NPRM to provide the opportunity for the public to comment on the merits of this change, and would further delay issuance of this AD, without increasing safety. Operators doing the inspection program are required to set up a tracking system for each inspection and maintain that system at all times, so very little additional work for recordkeeping should be required. The operator and the FAA can track the status of the inspections by inspection numbers assigned to each inspection requirement by the operator, or by the procedure and card number defined by the SSID, or by any other procedure approved by the FAA. We have not changed the final rule regarding this issue.

Request To Revise Reporting Requirement

Lynden asserted that the proposed reporting requirement of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) (as specified in Section 7.0 (Discrepancy Reporting) of the SSID) is unnecessary and burdensome, because operators must also file SDRs for all structural defects. Lynden stated that submitting the SDRs to the TC holder would comply with the proposed reporting requirements of the proposed AD, since the TC holder could simply query the FAA's SDR database and obtain the same information. To eliminate the need to develop two different reporting systems to comply with both reporting requirements, Lynden requested that we revise the proposed AD to either (1) specify that operators do not need to report to the TC holder if the report is made under the SDR requirements, or (2) match the proposed AD language to the specifications of the SDR.

We partially agree. Most of the information required by the SSID will be identical to the SDRs except for some minor changes. The results reported for the SSID inspections may be used for the SDRs (if the reports include all the information required as specified in the SDR reporting procedures), and the SDRs may be used for the SSID inspections. But to simplify the reporting requirements, one report may be used for both the SDR and the AD. We have revised paragraph (g) in this final rule to include this provision.

Request To Address Cracking Found During Non-SSID Inspections

Lynden requested that we clarify whether cracks found in SSID-specific PSEs fall under the scope of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), including repairing and reporting cracks found in SSID-specific PSEs during a non-SSID inspection.

We agree that clarification is necessary. All cracks found during a SSID inspection are covered by the SSIP reporting procedures. Cracks in a PSE found outside a SSID inspection are not part of the SSID reporting but do fall under the Aging Airplane Safety Rule (70 FR 5518, February 2, 2005) (Docket FAA-1999-5401) reporting so they will still need to be reported. The reporting procedures should be the same. We have not changed the final rule regarding this issue.

Request To Allow Future SSID Changes in AD

Lynden stated that, according to Section 1.0 (Purpose) of the SSID, Lockheed Martin will provide operators with a method to comply with section 121.1109 of the Federal Aviation Regulations (14 CFR 121.1109), which allows for continual adjustments to (1) account for changes in the product materials, parts, and processes; and (2) issue new or improved repairs and revisions of the structural repair manual and service bulletins. Lynden noted that changing an AD requires additional time and resources of the operator, the DAH, and the FAA.

We infer that Lynden was requesting that we revise the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to allow for unspecified adjustments to the requirements. We disagree. All changes to the SSID must be approved by the Atlanta ACO. We would consider superseding the AD only when significant changes to the SSID affect the airworthiness of the affected airplanes. The only requirements are those specified in the AD–in this case, the specific revision to the SSID. An operator wishing to use any changes in a future revision to the SSID (not mandated by the AD) must request AMOC approval in accordance with the provisions of paragraph (q) of this AD. We have not changed this final rule regarding this issue.

Request for Access to ''Reference 2''

Lynden alleged that the "initial flaw criteria" specified in Section 5.2 of the SSID are based on assumptions unknown to Lynden. The SSID states that the initial flaw size and flaw shape assumptions as well as the structural flaw configuration used in the DTA of crack growth are based on the assumptions determined in "Reference 2," as specified in that paragraph. Because "Reference 2" is reserved and therefore unidentified, Lynden asserted that it could not review or confirm the methodology. Lynden requested access to all information used to establish compliance with the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) to make substantive comment to the docket.

We disagree that access to "Reference 2" is necessary. We have reviewed "Reference 2" and approved the "initial flaw criteria." The information in "Reference 2" is the DAH's proprietary data, and the FAA cannot release this information to operators. We have determined that operators do not need this information to accomplish the SSID requirements. We accept the DAH's initial flaw size and flaw shape assumptions as well as the structural flow configuration used in the DTA of crack growth presented in "Reference 2." We have not changed the final rule regarding this issue.

Request To Clarify DAH's Involvement in SSID

Lynden interpreted Section 1.0 (Purpose) of the SSID as suggesting that the DAH anticipated an AD but did not expect it to be based on its ever-changing SSID document. Lynden added that the DAH did not understand that, after the AD is issued, the SSID requirements cannot be changed unless the operator obtains an AMOC or the FAA supersedes the AD. Lynden also asserted that the

first paragraph of Section 2.0 (Introduction) of the SSID clearly establishes that the DAH did not understand or appreciate how its SSID document would be used as the basis for an AD.

We disagree with Lynden's assertions. The DAH understands how its SSID will be used as the basis for the AD. The DAH also understands that the FAA must either supersede the AD to incorporate any significant changes to the SSID, or approve AMOCs to make any changes to SSID procedures or compliance times that are not specifically required by the AD. We have not changed the final rule regarding this issue.

Request To Identify Section 6.0 (Structural Inspection Requirements) of SSID

The proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) proposed implementing the requirements of Section 5.0 (Damage Tolerance Analysis Methodology) and Section 7.0 (Discrepancy Reporting) of the SSID, but LM Aero suggested that the most important requirements are in Section 6.0 (Structural Inspection Requirements). Section 6.0 (Structural Inspection Requirements) contains the references for the required inspection procedures as well as the compliance times for the initial and repetitive inspections. LM Aero stated that implementing the Section 6.0 (Structural Inspection Requirements) requirements will meet the DTA methodology requirements contained in Section 5.0 (Damage Tolerance Analysis Methodology). LM Aero agreed with the proposed requirement to comply with Section 7.0 (Discrepancy Reporting). Lynden concurred with this comment.

We agree with LM Aero's position. We have revised paragraph (g) in this final rule to include Sections 5.0 (Damage Tolerance Analysis Methodology), 6.0 (Structural Inspection Requirements), and 7.0 (Discrepancy Reporting) of the SSID.

Request To Provide Terminating Action

Lynden noted that the SSID, on page 6-12 in Section 6.0 (Structural Inspection Requirements), requires accomplishment of a certain inspection initially by 12,000 total flight hours, with recurring inspections due at intervals not to exceed 2,400 flight hours thereafter. Lynden requested that the SSID or the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) be revised to state that accomplishment of Lockheed Service Bulletin 382-71-24, dated January 21, 2010, eliminates the need for this recurring inspection requirement.

We disagree with the request to allow accomplishment of Lockheed Service Bulletin 382-71-24, dated January 21, 2010, as terminating action for the specified inspection requirement. Lockheed Service Bulletin 382-71-24, dated January 21, 2010, was never approved by the Atlanta ACO as terminating action. But replacing the bushing and repairing existing damage per Lockheed Service Bulletin 382-71-24, dated January 21, 2010, will allow operators to zero out the time for the inspection. Operators may request an AMOC for relief from this requirement in accordance with the provisions of paragraph (q) of this AD, provided data are provided that show that accomplishment of Lockheed Service Bulletin 382-71-24, dated January 21, 2010, would provide an acceptable level of safety allowing for this terminating action. Since not all operators have accomplished the actions specified in Lockheed Service Bulletin 382-71-24, dated January 21, 2010, the inspections must remain in the SSID. We have not changed the final rule regarding this issue.

Request To Clarify Impact on Alaska Operations

Lynden interpreted the Regulatory Evaluation for this action as stating that the AD would have no impact on intrastate aviation in the state of Alaska. Lynden reported that it moves over 82 million pounds of cargo per year in Alaska, so the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) would definitely have an impact on those operations.

We agree to provide clarification. The Regulatory Evaluation states that the AD "could affect intrastate aviation in Alaska," but adds that it is not "appropriate to include specific requirements for

aircraft operated in Alaska." This AD applies only to airplanes when operated outside the territorial boundaries of Alaska. We have not changed the final rule regarding this issue. Because of the nature of the unsafe condition, we cannot justify a regulatory distinction between aviation only in Alaska and other aviation.

Request To Account for Widespread Fatigue Damage (WFD) Rulemaking

Lynden was concerned about the pending rulemaking related to WFD to propose certain changes to the requirements for evaluating structure, assigning inspections, and doing other maintenance or alteration tasks.

Lynden made no specific request. The SSIP does not account for the effects of WFD. We have not changed the final rule regarding this issue.

Additional Changes Made to This AD

We have revised this final rule to identify the legal name of the manufacturer as published in the most recent type certificate data sheet for the affected airplane models.

We have added new paragraph (e) in this final rule to provide ATA subject code 51: Standard practices/structures. This code is added to make this final rule parallel with other new AD actions. We have re-identified subsequent paragraphs accordingly.

We have revised paragraph (g) of this AD to remove the phrase "FAA-approved" from "FAA-approved maintenance inspection program," because we do not approve operators' maintenance programs.

We have removed the "Service Information" paragraph from this final rule. (That paragraph was identified as paragraph (f) in the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)).) Instead, we have provided the full document citations throughout this final rule.

Since we issued the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)), we have increased the labor rate used in the Costs of Compliance from $80 per work-hour to $85 per work-hour. The Costs of Compliance information, below, reflects this increase in the specified labor rate.

We have re-identified Note 3 of the proposed AD (72 FR 64005, November 14, 2007; corrected December 3, 2007 (72 FR 67998)) as Note 1 of this final rule, and relocated that note to follow paragraph (g) of this AD. We have reidentified subsequent notes accordingly.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

There are about 91 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for the 14 U.S. airplanes to comply with this AD.

Estimated Costs

Action	Work hours	Average labor rate per hour	Fleet cost
Revision of maintenance inspection program	600 for the fleet	$85	$51,000
Inspections	2,724 per airplane	$85	$3,241,560, per inspection cycle

The number of inspection work hours, as indicated above, is presented as if the accomplishment of the actions in this AD are to be conducted as "stand-alone" actions. However, in actual practice, these actions for the most part will be done coincidentally or in combination with normally scheduled airplane inspections and other maintenance program tasks. Therefore, the actual number of necessary additional inspection work hours will be minimal in many instances. Additionally, any costs associated with special airplane scheduling will be minimal.

Further, compliance with this AD is a means of compliance with the aging airplane safety final rule (AASFR) for the baseline structure of Model 382, 382B, 382E, 382F, and 382G series airplanes. The AASFR requires certain operators to incorporate damage tolerance inspections into their maintenance inspection programs. These requirements are described in 14 CFR 121.370(a) and 129.16. Accomplishment of the actions required by this AD will meet the requirements of these CFR sections for the baseline structure. The costs for accomplishing the inspection portion of this AD were accounted for in the regulatory evaluation of the AASFR.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-06-09 Lockheed Martin Corporation/Lockheed Martin Aeronautics Company: Amendment 39-16990. Docket No. FAA-2007-0109; Directorate Identifier 2007-NM-235-AD.

(a) Effective Date

This AD is effective May 15, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 382, 382B, 382E, 382F, and 382G airplanes, certificated in any category.

(d) Unsafe Condition

This AD results from a report of incidents involving fatigue cracking and corrosion in transport category airplanes that are approaching or have exceeded their design service objective. We are issuing this AD to maintain the continued structural integrity of the fleet.

(e) Subject

Air Transport Association (ATA) of America Code 51: Standard Practices/Structures.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Revision of the Maintenance Inspection Program

Within 12 months after the effective date of this AD, incorporate a revision into the maintenance inspection program that provides no less than the required damage tolerance assessment/analysis (DTA) for each structural significant item (SSI) listed in Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007. (The required inspection interval for each principal structural element (PSE) is listed in Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007.) The revision to the maintenance inspection program must include and must be implemented in accordance with the procedures in Section 5.0 (Damage Tolerance Analysis Methodology), Section 6.0 (Structural Inspection Requirements), and Section 7.0 (Discrepancy Reporting) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP),

Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007. One report may be used to report findings for both the service difficulty report and this AD, provided the report refers to this AD and the PSE number for the inspection being accomplished when the discrepancy was found.

Note 1 to paragraphs (g) through (p) of this AD: Compliance with the requirements of this AD establishes compliance with section 121.1109(c)(1) of the Federal Aviation Regulations (14 CFR 121.1109(c)(1)).

(h) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(i) Initial and Repetitive Inspections

At the later of the times specified in paragraphs (i)(1) and (i)(2) of this AD, except as provided by paragraphs (j) through (n) of this AD: Do the applicable initial inspections to detect cracks of all SSIs, in accordance with Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007. Repeat the applicable inspections thereafter at intervals not to exceed the "Recurring" intervals specified in Section 6.0 (Structural Inspection Requirements) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, except as provided by paragraphs (l) through (n) of this AD.

(1) Before the applicable "Initial" threshold specified in Section 6.0 (Structural Inspection Requirements) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007.

(2) Within 36 months after the effective date of this AD, or within one "Recurring" interval measured from 12 months after the effective date of the AD, whichever comes first.

(j) Exception to Service Information Compliance Time (Threshold Since New)

Where Section 6.0 (Structural Inspection Requirements) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, specifies the "Initial" threshold in years (since new), this AD requires compliance within the specified year since the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.

(k) Exception to Service Information Compliance Time (Special Condition)

Where Section 6.0 (Structural Inspection Requirements) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, specifies the "Initial" threshold as "Special Condition," this AD requires compliance within 24 months after the effective date of this AD.

(l) Exception to Service Information Compliance Time (Fuselage Station (FS) 1041 Fitting Replacement)

Where Section 6.0 (Structural Inspection Requirements) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, specifies the "Initial" threshold and "Recurring" interval as "FS 1041 Fitting Replacement," this AD requires compliance within 24 months after the effective date of this AD and thereafter at intervals not to exceed those specified in Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, concurrently with any FS 1041 fitting replacement.

(m) Exception to Service Information Compliance Time (Engine Change)

Where Section 6.0 (Structural Inspection Requirements) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, specifies the "Initial" threshold and "Recurring" interval as "Engine Change," this AD requires compliance before further flight after the next engine change, and thereafter before further flight whenever the engines are changed.

(n) Exception to Service Information Compliance Time (Aft Lord Mount Change)

Where Section 6.0 (Structural Inspection Requirements) of Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, specifies the "Initial" threshold and "Recurring" interval as "Aft Lord Mount Change," this AD requires compliance before further flight after the next aft lord mount change (FS 1041 fitting change), and thereafter at intervals not to exceed those specified in Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007, concurrently with any FS 1041 fitting replacement.

(o) Repair

If any cracked structure is found during the inspections required by paragraph (i) of this AD, before further flight, repair the cracked structure using a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA. For a repair method to be approved by the Manager, Atlanta ACO, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

Note 2 to paragraph (o) of this AD: Applicable existing FAA-approved repair procedures do not require further approval provided they have DTA-established inspection procedures and intervals previously approved by the FAA.

Note 3 to paragraph (o) of this AD: Operators may contact the Manager, Atlanta ACO, for information regarding the use of published service data approved by the FAA associated with the repairs specified in paragraph (o) of this AD.

(p) Inspection Program for Transferred Airplanes

Before any airplane that is subject to this AD and that has exceeded the applicable compliance times specified in paragraph (i) of this AD can be added to an air carrier's operations specifications, a program for the accomplishment of the inspections required by this AD must be established in accordance with paragraph (p)(1) or (p)(2) of this AD, as applicable.

(1) For airplanes that have been inspected in accordance with this AD: The inspection of each PSE must be done by the new operator in accordance with the previous operator's schedule and inspection method, or the new operator's schedule and inspection method, at whichever time would result in the earlier accomplishment for that PSE inspection. The compliance time for accomplishment of this inspection must be measured from the last inspection accomplished by the previous operator. After each inspection has been done once, each subsequent inspection must be performed in accordance with the new operator's schedule and inspection method.

(2) For airplanes that have not been inspected in accordance with this AD: The inspection of each PSE required by this AD must be done either before adding the airplane to the air carrier's operations specification, or in accordance with a schedule and an inspection method approved by the Manager, Atlanta ACO. After each inspection has been done once, each subsequent inspection must be done in accordance with the new operator's schedule.

(q) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta ACO, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(r) Related Information

For more information about this AD, contact Carl Gray, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, Atlanta, Georgia 30337; phone: 404-474-5554; fax: 404-474-5606; email: carl.w.gray@faa.gov.

(s) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

(i) Lockheed Martin Model 382, 382B, 382E, 382F, and 382G Series Aircraft Service Manual Publication (SMP), Supplemental Structural Inspection Document (SSID), SMP 515-C-SSID, Change 1, dated September 10, 2007.

(2) For service information identified in this AD, contact Lockheed Martin Corporation/Lockheed Martin Aeronautics Company, Airworthiness Office, Dept. 6A0M, Zone 0252, Column P-58, 86 S. Cobb Drive, Marietta, Georgia 30063; telephone 770-494-5444; fax 770-

494-5445; email ams.portal@lmco.com; Internet http://www.lockheedmartin.com/ams/tools/TechPubs.html.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on March 12, 2012.

John P. Piccola,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.